

Q. That would manufacture RDX?

A. I should like the Commission to take under consideration, if it will, that by that time the chemicals which went into that process were fairly well known, not only to those working who were working on it, because the plant at Shawinigan Falls was already in operation and once a plant begins to operate, then of course carloads of material come in, hundreds of workmen are employed, and it is generally considered that it is no longer possible to keep the process secret.

Q. That is as to the ingredients, but the formula is still secret?

A. That formula is not, my, no; the formula was published, the formula for RDX was known in 1904, as I mentioned.

Q. But not the formula you worked out?

A. Oh, yes, it is the same formula.

Q. I understood you to say that the formula you had worked out was the one you had to satisfy the British would work and that you had to satisfy the Americans it would work?

A. We had to satisfy them that the material we were making, the actual white powder we were making was the same white powder as was made by the other process.

Q. You told me that in your process you required different materials?

A. Yes.

Q. You told Mr. Williams a few minutes ago about the four materials entering into your process, and that they were different from the British process?

A. Yes.

Q. The formula was not known as to the proportions but as to the materials entering into it?

A. That is right.

Q. You say that in 1904 German scientists evolved a formula? Do I understand you correctly?

A. May I interrupt?

Q. Yes.

A. Let us make sure what we mean by formula.

Q. Yes?

A. What I mean by formula is the actual spacing of the atoms in RDX. It has nothing to do with the process or how to make it. It is just the picture of it, in other words.



- Q. I was using formula in a different sense, to mean the ingredients and the proportions.
- A. I see.
- Q. Using formula in my sense, for the time being, that was not known in 1904?
- A. Oh, no.
- Q. It was not known until you devised it?
- A. That is correct.
- Q. And you say that this Shawinigan Falls plant got operating and anybody who took some trouble to find out what they were using could find out the four items you had been using?
- A. Definitely. In fact, one of my students who went to Shawinigan Falls was told by someone not connected with that plant what was going into the plant and what they were making.
- Q. But neither that student nor anybody else could ascertain from Shawinigan Falls, except improperly, the formula of the product being made in Shawinigan Falls, using formula in the sense I am using it?
- A. That is correct.
- Q. And that is part of the information you gave to Rose?
- A. That is correct.
- Q. You also gave him, as I recall, the different ways in which RDX was used?
- A. Yes. They were not new, of course. They were worked out by the British prior to this last war.
- Q. You say they were published?
- A. No, oh, no, they were not.
- Q. They were still secret?
- A. Oh, yes.
- Q. Perhaps we should know what you told him about that?
- Q. Just go ahead and detail as much as you can of that conversation?
- A. I told him that RDX was used as a high explosive in the form of what is known as Composition A, which is a composition of RDX and beeswax. I told him that RDX was used in the form of Composition B, which was RDX, TNT and beeswax. I told him that RDX was used in the form of torpex, which is the same as Composition B with aluminum dust added. I told him RDX was used in the form of a plastic explosive.



- Q. Were those uses existing uses?
- A. Yes.
- Q. By whom?
- A. By the British.
- Q. And — ?
- A. And the Americans.
- Q. And the Canadians?
- A. We did not make all of those four in Canada, no.
- Q. That information came to you in connection with the Research work you were doing?
- A. Yes.
- Q. And as a result of that?
- A. Yes.
- Q. And it would be just as secret as the formula for RDX, using formula in the sense I have used it?
- A. I would not consider it so, no, since it was not new.
- Q. It was not as secret?
- A. Let us put it this way: The Germans were using those same compositions, I think that brings the distinction out.
- Q. Were the Russians?
- A. Not so far as I know or knew.
- Q. That was another thing they wanted to learn about?
- A. Yes.
- Q. So far as these combinations and methods of use that you have been mentioning and that you told Rose, so far as you knew at that time you were telling him something that was new to the Russians?
- A. That is correct.
- Q. How long did that conversation take, Dr. Boyer?
- A. Perhaps half an hour.
- Q. Could you fix the date more accurately than you have done, the date of this conversation in Rose's apartment?
- A. I am sorry, I cannot.
- Q. You said it was in what year?
- Q. Early 1943?
- A. That is what I thought.
- Q. Was Rose taking notes?
- A. Yes.



Q. Are we to understand that the first time you talked to him about RDX was at his apartment pursuant to his request?

A. That is correct.

Q. You met him more than once at his house, did you?

A. Yes.

Q. How many times did you meet him?

A. Three or four times.

Q. During those three or four times did you discuss RDX?

A. That is correct.

Q. Did you discuss anything else with him, Dr. Boyer, of a similar nature?

A. Nothing confidential. We would discuss the course of the war, any new weapons that were used, the strategy that was used and any of the technical aspects of the war, but not anything confidential.

Q. Why was it necessary to have three or four conferences with him to give him the RDX story?

A. As I say, I did not give him all that material the first time.

Q. The material you gave him the first time you knew he was going to transmit to Russia in some way?

A. Yes.

Q. At the next meeting you gave him more information which you knew he was going to transmit to Russia?

A. Yes.

Q. Would it be three or four meetings that it took you to turn over all that material?

A. Well, no; at least once he asked me whether there was anything new in RDX and I simply said, "No."

Q. How far apart were those meetings?

A. Oh, I would say six months.

Q. Do you mean to say six months would cover the three or four meetings or would each meeting be about six months apart?

A. That each would be about six months apart.

Q. During all that time you were still working continuously on the development of RDX?

A. Yes.

Q. And each six months you would have a little more to tell him? Would that be right, would that be putting it fairly?

A. No, that represents all the story that I told him.



Q. What I am getting at is this: Could you have told all to him at the first meeting, or had developments taken place that enabled you to add to what you told him at subsequent meetings?

A. I think I could have told him all of that information at the first meeting.

Q. You think you could?

A. Yes.

Q. Prior to this meeting at the house, at Rose's apartment, when he first asked you for RDX, had he shown any inclination of asking you for some information before that?

A. No.

Q. Well, when he broached this subject to you on that first occasion, when he definitely asked for information, did it come to you as a surprise?

A. Yes.

Q. But you did give it to him on that first occasion?

A. Yes.

Q. You are not sure on that; you say it might have taken two or three interviews?

A. That is right. I did not give him all of that. I have told you now that I did not give him all of that on that first occasion.

Q. Was there a little more six months later; did you convey information also in 1944?

A. Yes.

Q. And through 1945?

A. No.

Q. When did you see him last?

A. Late summer of 1945.

Q. Did you ever transmit any information of a secret nature to him other than at his own house?

A. No.

Q. You did not meet him any place else?

A. No.

Q. He did not come to your house for it?

A. No. He came to our house but not —

Q. Not for the purpose of the transmission of information?

A. That is right.



Q. Was it agreed that you would come back in six months or did he phone you for the second meeting?

A. He would telephone me each time.

Q. During the interval I presume you would see him personally?

A. I saw him once or twice, perhaps.

Q. You were handing over to somebody, who was obviously an emissary of the Russians, information which your oath of secrecy forbade you to give?

A. That is correct.

Q. Would you like to tell the Commission what moved you to do that, why you did it? I mean that any statement or explanation you feel that the Commission should have, I know they would like you to make.

A. I have already made a statement how Mr. Howe was willing to give it to the Russians and was not allowed to do so by the Americans. I felt throughout the work that it was unfortunate that the Russians, that there was not closer scientific liaison in connection with such information between the Russian war effort and ours. In fact I mentioned that a good many times. I was very anxious to see a technical mission, a British-American-Canadian technical mission in Russia and a similar Russian mission in Canada. I felt it was of great importance that the scientific war effort on the two fronts should be coordinated. That is all I have to say.

Q. At that time, when you gave that information to Fred Rose, you knew that Mr. Howe did not have permission to give it to the Russians?

A. Yes.

Q. You realized, Dr. Boyer, that what you were doing was contrary to the oath that you had taken?

A. Yes.

Q. Before you proceed to the next point, Dr. Boyer, when you gave that information to Rose, you told us that you had some information from Dr. Ross as to Mr. Howe's views as to whether or not it should be disclosed to the Russians. At the time you gave that information to Rose, did you tell Dr. Ross or anybody else in the National Research Council that you had done so?

A. No.



Q. Would you have been prepared at that time to tell anybody that you had done so?

A. I don't understand.

Q. Would you have been prepared to tell Dr. Ross or anybody else in the National Research Council that you disclosed that information?

A. Under what circumstances do you mean? If I had been asked?

Q. If you had been asked, or would you have volunteered it?

A. No.

Q. In other words you did not want to let it be known to anybody that you had given that information to Rose?

A. That is correct.

The kernel of Boyer's evidence is contained in the following:—

Q. It has also been made to appear before us that other persons who were giving secret information, either directly to the Russians or for transmission to the Russians during the last few years, were either Communists or had definite Communist leanings. It would seem apparent that when Rose asked you for information as to the work that you were engaged in that he did that because he knew you for some considerable time. Would that be a fair deduction?

A. Well, I have known him ever since 1938.

Q. Not only have you known him, but you were known to him; is that so?

A. I had worked in many organizations with Communists, yes.

Q. And would it be a fair deduction to say that Rose spoke to you because he knew how you stood with regard to the Communist Party?

A. Yes.

Q. Would it also be a proper inference to say that you gave Rose information because of that same Communist leaning or sympathy which you had?

A. Yes, I think that is a proper inference.

Q. You spoke of this Committee for Allied Victory, and I think you said that was an organization that was organized by Communists or persons with Communist leanings; am I right in that?

A. I think it may have been; I was not present at the first few meetings.

Q. Was that not your judgment later?

A. Yes.



Q. There would be no question that the interests of that Committee at that time and its expressed object of allied victory coincided with the interests of Canada at that time?

A. In my opinion that would be so.

Q. So that there are times when the interests of the members of the Communist Party or its sympathizers do coincide with the interests of Canada in which they are citizens?

A. Every time so far as my work is concerned.

Q. Just let us deal with that for a minute. There was no question about that?

A. That is right.

Q. In your mind, and there is none in mine. But when it came to imparting information with regard to RDX to Rose, you could not say the same thing about that, could you?

A. Well, I still felt that it was of tremendous importance that there should be a full exchange of information between Russia and Canada and the United States and England.

Q. I know, but, Dr. Boyer, you have already said that the thing that influenced you in actually giving that information was your Communistic sympathies, and in so doing it you knew at that time that it was the official policy of Canada not to impart that information to unauthorized persons; that is right?

A. That is correct.

Q. In fact you had taken an oath not to do that very thing?

A. That is correct.

Q. So in doing that in that particular instance you were put in a position where you had to act contrary to the interests of Canada as laid down officially?

A. That is correct.

It was on this evidence that in our interim report of March 14, 1946, we said:

"We have now heard Dr. Boyer and he has told us that commencing early in 1943, and continuing into 1944, he gave, for transmission to the Soviet Union, full information with regard to his work which he himself admits was secret. He said that with this information competent persons would be in a position to design a plant to produce the material in quantity."

Being required by Order in Council P.C. 411 to "inquire into and report upon which public officials and other persons in positions of trust or



otherwise have communicated directly or indirectly secret and confidential information, the disclosure of which might be inimical to the safety and interests of Canada, to the agents of a Foreign Power and the facts relating to and the circumstances surrounding such communication" we report that Boyer, on his own admission, did so communicate.



PF 125 . 073 .

## SECTION III. 12

## [J. S. BENNING.] Montreal and Ottawa.

This man, who was born in Montreal of parents born in Newfoundland, entered the employ of Allied War Supplies Corporation, a Crown Company, in June, 1942, taking an oath of secrecy on July 7th "not to divulge any knowledge or information obtained by me in the course of my employment to anyone not employed by this Corporation unless expressly authorized by my superior officers". Shortly thereafter he was transferred from Montreal to the Department of Munitions and Supply in Ottawa. Benning had been hired by Allied War Supplies Corporation on the recommendation of Gerson, his brother-in-law, upon whom we are also reporting. His service with Allied War Supplies Corporation was for training purposes only. It was understood that he would shortly go to Ottawa. The following evidence by an official of the Corporation, describes the situation:—

A. He was hired by me at the suggestion of Mr. Gerson, his brother-in-law. Colonel Ogilvie wished to get a reliable man in his office in Ottawa. He was having difficulty getting a satisfactory man and he had tried two or three people and he was getting rather disgusted. He asked us if we could do anything to help him out and Gerson suggested he had a man available who happened to be this Scott Benning. I was asked to give him a job and teach him something about the game in my office so that when he went to Ottawa he would have that background . . . I think there was some difficulty of that nature in Ottawa, which did not concern me, at any rate. I employed him with the understanding that after a few weeks' training he would go to Ottawa, and that was carried out.

Q. He trained with you two months, I understand?

A. Well —

Q. What was the nature of his work?

A. With me?

Q. Yes?

A. Just getting all the information he could about what we were doing, how we kept our records, so that when he went to Ottawa



Ogilvie's department.

— we had to keep very closely in touch with the work in Colonel

Q. I would just like you to explain to the Commission the relation between Allied War Supplies Limited and the Department of Munitions and Supply, the Filling Branch of that department, of which I understand Colonel Ogilvie was the head?

A. Yes, sir. The Department of Munitions and Supply was responsible for all ammunition and the supplying of many other things, including filling. But they found it advisable, for contractual purposes, to set up Allied War Supplies to do certain things for them, including the looking after of ammunition filling. They retained the right of placing contracts for the shells, cartridge cases, fuses and other metallic components which we would use. The Ammunition Production Branch in Ottawa saw that we were supplied with components as they became available. They had to keep up with the program they set out for us to carry on, but it did not always happen that way and that was one reason why we were kept so busy in dealing with these supplies of components. Colonel Ogilvie was very much interested in knowing how we were getting along with our production and in knowing how we were getting along with our components, how we were getting them, whether we had any difficulty in connection with shipments that were being handled by other departments of Department of Munitions and Supply. He wanted to be kept familiar with all this.

In addition to that he had to pretty nearly duplicate some of our records because he had to answer so many questions put by other Departments in Ottawa. They were always asking for information so he could not just leave it and say, "Well, it is probably your baby, you carry on with the production and keep your records." He had also to duplicate our records in Ottawa in order that he could answer questions that were thrown at him from various sources.

Q. How would you contrast the work that Gerson was doing with Allied War Supplies with the work he was doing with the Department of Munitions and Supply?

A. Very similar. It was just taken over, that work was taken over by the Department of Munitions and Supply on a certain date and he carried on there.



Q. Would the same thing apply to Benning?

A. Benning was looking after these records, the duplicate records in Ottawa, for Colonel Ogilvie all along; that was his employment.

Q. So that the training he got with you at Allied War Supplies was just to fit him to do the work in the Department of Munitions and Supply?

A. Yes, sir.

On Benning's transfer to Ottawa he took another oath of secrecy in terms similar to the first, on July 21st, 1942, which was the date of his transfer. Benning was employed in the Ammunition Production Branch of the Department, of which H. R. Malley and Colonel Ogilvie were directors. In 1943 he was promoted. What was being mooted for him at that time is set out in a letter of August 7, 1943, to the Director-General of the Organization and Personnel Branch of the Department as follows —

"In July 1942, Mr Benning was engaged to understudy G. S. Holland, who maintained all records and reports for the Division without assistance.

"There have been no changes or improvements in the methods of recording or reporting since Mr Benning took over. An additional clerk, grade 3, was engaged last fall to assist with the records and this clerk is now capable to do any of the records or reports.

"Mr Benning also spends considerable part of his time answering inquiries and making arrangements in connection with the shipment of filled ammunition and advising the production divisions in connection with programme changes and component requirements of the filling plants. He has a keen grasp of his duties and is doing an excellent job.

"The Ammunition Filling Division acts as liaison office between the Production Divisions and Allied War Supplies. All inquiries from either are funnelled through the Filling Division. The records kept by this Division are really a duplication of information kept at Allied War Supplies. If the latter organization issued detailed statements in conformity with Filling Division requirements, it would not be necessary to maintain records here."

As of April 30, 1944, Benning became joint Secretary of the Canadian Munitions Assignment Committee. This Committee consisted of representatives of the three armed services, the British Army, and Allied War Supplies Limited. This Committee allocated munitions on the basis of statistics supplied by the Economics and Statistics Division of the Department of Munitions and Supply.

An official testified regarding this Committee as follows —

Q. And there were monthly meetings of the Committee, were there not?

A. Yes, there were.



- Q. What was done at those monthly meetings?
- A. At the meetings all parties were represented, and they allocated the stores that were on the allocation list to these different services and to the British and Americans.
- Q. The allocation would be made on the basis of a forecast of the following month's production. Is that correct?
- A. That is correct. They would get a four-month forecast, but only allocate on the first month following the forecast.
- Q. So the full name is *Canadian Munitions Assignment Committee (Army)*?
- A. That is right.
- Q. And that Committee would make its allocations, and then Benning would receive a directive from it?
- A. From the Committee he would receive a directive, which in turn he would turn over to the different Directors General of the Munitions and Supply, and those Directors General would direct the companies making the munitions and tell them where to send the munitions.
- Q. That is, Benning would get a directive showing the allocation of the munitions?
- A. Correct.
- Q. And he would pass that on to the Directors General of production?
- A. That is right.
- Q. And they would see that the munitions were sent to the persons named in the directive to receive them?
- A. That is right.
- Q. And those forecasts were made up in what way?
- A. Those forecasts relating to the Committee, they were just four-month forecasts. You see, all Canadian munitions were not assignable. Whenever there were different services or different countries wanting the same store, for instance the same type of ammunition, the 40 millimetre, for instance, we would get a forecast for the next month of what the Canadian plants would make, and then for four months after.
- Q. So that a week before each of the monthly meetings—
- A. Yes.
- Q. — Benning would get the forecasts?
- A. Of all the stores that were assignable.



- Q. When you use that expression, do you mean all the stores that were assignable to branches of the Canadian forces, or assignable to other countries?
- A. Whenever a store was wanted by more than two branches or two countries, there was a request that it would be put on the assignment list, and that store then would be forecast.
- Q. In addition to his work with the Assignments Committee, Benning fulfilled other functions, did he not?
- A. Yes, he did.
- Q. What were those?
- A. He helped get information and compile a quarterly report that we called *Forecast of Canadian War Production*. It was quite a big report, and we were all allocated different programs to look after, and he was taking care of gun ammunition, small arms ammunition, mechanical transport, and armoured fighting vehicles. That would mean to say that he would go to the different Directors General of these branches I have just named and get the Forecasts for the following eighteen months on all stores produced by those branches.
- Q. Then in the event of failures, in the Forecasts, that is in the event of failure to produce what was forecast for that period, what duties had Benning?
- A. Every month we had to go back to these different Directors General and get a revised Forecast on all the stores; and if there were any revisions we would make another report called a supplement to the quarterly Forecast, and every month we would put out a supplement.
- Q. Now I show you a document which is marked as Exhibit 218, *Forecast of War Production in Canada for 1944 and First and Second Quarters of 1945, July 1, 1944*. That is the Forecast to which you are referring?
- A. That is right.
- Q. Benning would work on the preparation of this document?
- A. Yes, he would work on the preparation of the document, but especially on those four points I named.
- Q. The four points you have named first, gun ammunition, second, small arms ammunition, third, mechanical transport; fourth, armoured fighting vehicles?
- A. That is right.



- Q. And would you also work on those statistics in connection with the preparation of reports like Exhibit 218?
- A. Yes. You see, it is a big one, and I had other programs. He had those four I have just named, and I was looking after others.
- Q. Then I show you a document which has not yet been marked, but which I suggest we mark as Exhibit 218-A. This document is marked *Secret* and is headed *Department of Munitions and Supply. Economics and Statistics Branch. Monthly supplement to quarterly Forecast of War Production. Supplement for October 1, 1944.* That is the monthly supplement to which you have just referred?
- A. That is right.
- Q. That would be prepared in the same way, by Benning and yourself?
- A. That is right.
- Q. And would take in —?
- A. Just take in the stores on which there are changes.
- Q. Then a number of copies of these monthly supplements would be made, I understand?
- A. Yes, sir.
- Q. And out of them would be cut slips which would be pasted in the main Forecast report, in the manner indicated in Exhibit 218?
- A. Yes. Well, we wouldn't do it that way.
- Q. Just explain how that would be done?
- A. This, I think, is one of Mr. Carmichael's, the Co-ordinator of Production, his copy of our Forecast. We would send him a copy of this.
- Q. A copy of Exhibit 218-A?
- A. Yes, and instead of changing the whole thing, what he would do would be to paste it the way it is there.
- Q. The way it is in Exhibit 218?
- A. Yes. What we would do, we would take our Forecast up to see the branch concerned, and we would say, "Are there any changes on this Forecast?" If there were, then we would just write it down in pencil in our own Forecast, and then have that supplement typed from that.



Q. Would any of the information contained in Exhibit No. 218 or Exhibit No. 218-A come to you from the United Kingdom?

A. No, we sent it to the United Kingdom.

Q. You sent it to the United Kingdom?

A. That is right.

Q. Both of these deal with production in Canada?

A. That is right. That is only the Canadian production, but we do get information apart from that from the United Kingdom.

Q. In what form does that information come?

A. It would be just reports. We would get reports monthly from the United Kingdom on their production of different stores. They would not give us their whole production, but they would give us all the aircraft and all the ammunition and a few more programs like that in which we were interested to compare with Canadian production.

Benning was at the same time made Assistant Secretary of the Depreciation Committee under the jurisdiction of the Co-ordinator of Production. His duties in this post were:

**Duties:** Under the direction of the Secretary to be responsible for the processing of the applications received from industry for depreciation under P.C. 8640 of Nov. 10/44, and to implement policy and procedural directions. In addition, to be responsible for the Agenda and the Minutes of the Weekly Meetings, and Weekly Report to the Deputy Minister. Finally, to assist in maintaining liaison with industry and other Government Departments through correspondence and personal interviews with a view to dissemination of information in connection with the depreciation.

On October 15, 1945, Benning became Secretary of the Production Board.

In the notebook kept by Colonel Zabolin in which he entered information given him by Koudriavtzev as to the espionage organization operated by the latter and Major Sokolov, the following relating to Benning appears:



**Foster—Englishman. Assistant to the superintendent of the Division of distributing of war production at the ministry of Munitions and Supplies.**

**Has been giving materials on war supplies: guns and other kinds of supplies.**

**He obtained different work with promotion. Can better give materials.**

**He is contacting with Martin.**

**(Ours).**

Zabotin began to make these notes sometime after his arrival in Ottawa in June 1943 on information received from Sokolov and Koudriavtzev. They would appear to have been added to at different times. As appears by the letter of August 7th above† Zabotin's or Koudriavtzev's description in the above notes of Benning's then position is quite recognizable. Benning was then under consideration for transfer or promotion to the Economics and Statistics Branch.

*Foster* was the cover name given to Benning in the Embassy and *Martin* was the cover name for Zheveinov, one of the TASS representatives in Ottawa. That Benning was "contacting with" Martin means that Martin was the person to whom Benning was making his communications.

Colonel Zabotin's mailing list to Moscow of January 5, 1945, credits Benning as the source of supply of items 111 to 173, inclusive, 177 to 179 inclusive, and 191 to 194, inclusive, of which thirty-two items are expressly stated to have originated in the Department of Munitions and Supply. Many others from the descriptions given are also identifiable as originating in that Department.

Item 112 is described as a manuscript as to aeroplane production of October 1944. The evidence shows that for the month of October 1944, (a practice that was followed each month), there was prepared by Federal Aircraft Limited and sent to the Economics and Statistics Branch—

A. . . . the complete production program of aircraft for the month of October, 1944, by the different plants which are set out here. You have the Boeing Aircraft plant in Vancouver, the Canadian Associated Aircraft in Montreal, the Canadian Car and Canadian Vickers and so on down the line, with the type of aircraft, such as P.B.Y., Hampton, Grumman, Hurricane, Curtiss, this is what they call the Curtiss Hellcat, and so on. They have the complete story. In addition at the bottom here we have deliveries on orders for aircraft not produced in this country, and you have the same story.

†See p. 413 above.



Q That is the column under the heading "*United States Orders and Deliveries*".

A. That is correct.

Q. I did not follow that. What is the story at the bottom of that sheet?

A. Those are deliveries of orders placed outside this country. In other words, production in the United States.

Q. And delivered in Canada?

A. And delivered to Canada.

Q. So the first part is what is manufactured in Canada?

A. Correct.

Q. And the second part is what is manufactured for Canada in the United States?

A. That is right.

Q. What use does the Economics and Statistics Branch make of those documents?

A. That is used in the preparation, or they are used in the preparation of the monthly production report.

Q. That would be this document, Exhibit 218?

A. That is the *Forecast*.

Q. There is a report made of actual production?

A. Actual production.

Q. And Mr. Benning was working on the reports of actual production?

A. Yes, that is correct.

Q. And on the *Forecasts* also?

A. On the *Forecasts*, yes.

Item 113 on the mailing list is also a manuscript dealing with production of ships dated October 1944.

As to this an officer of the Department deposed:—

Q. Then Exhibit 16, Item 113, is manuscript, *production of ships*, October, 1944, and you produce a document which will be marked No. 403?

A. Yes.

Q. The first sheet is headed, *Estimated sequence of completion dates up to February 28, 1945, for naval escort vessels*. It is actually dated December 6, 1944, but under the heading "Vessels delivered to November 30, 1944" it shows the delivery of vessels for the month of October, 1944, as well as other months. That is correct, is it not?

A. Yes.

Q. Then below the monthly deliveries there is a heading *Deliveries by yards*. That does not show it broken up as to months, but only as to numbers; that is correct?

A. Types of ships.

Q. The third sheet is headed *Wartime Shipbuilding, Limited, Montreal, Cargo Ships, Monthly Report, October, 1944*.

A. Correct.

Q. That shows all the cargo ships delivered in October, 1944, their actual gross tonnage, the shipyard in which they were built, the delivery date and to whom they were delivered.

Q. Are the figures on the third sheet included in the first two sheets?

A. There is a second sheet here covering the production of cargo ships similar to this one. This one covers the naval ships.

Benning had access to this document but he had no occasion to require this particular information for his work as he was not concerned with ships.

Item 114 is thus described in the mailing list:—

Nos. P.P.	Source	From where and under what circumstances the material was obtained	Designation of the Material	Date and Number	Number of pages	Marked
1	2	3	4	5	6	7
114	Foster	Copy	Telegram No 2151	29.11.44	5	—

This telegram was produced from the departmental files and is a telegram from the Ministry of Supply, London, to the Secretary of State for External Affairs dated November 29, 1944, bearing Number 2151. A copy was sent to the Department of Munitions and Supply but owing to its contents its circulation was restricted to a very few officials. Benning had to see it for his work.

Q. Is that a matter that Mr. Benning would have to deal with in the course of his duties?

A. He would see this telegram, or rather he would see the copy of the telegram received by Mr. Carmichael. A copy of it was sent to the Economics and Statistics Branch and it was consolidated into the forecast.

A number of items on the mailing list, 118, 120, 124, 126, 129, are described variously as *corrections and correction of contracts*. In the Economics and Statistics Branch the Forecast of War Production was maintained from information supplied through the Ammunition Production Branch of



the Department. As new information was received by the Economics and Statistics Branch corrections were made in the *Forecast*. Such corrections sometimes were received in the form of cables and the information was then entered on the *Forecast*. Each quarter a new document was prepared and treated similarly. After July 1st, 1944, there was a change in practice, described as follows:—

A. Exhibit 218 is described as *Forecast of War Production in Canada for 1944 and the First and Second Quarters of 1945*, dated Ottawa, July 1st, 1944, now, it was the practice for the Economics and Statistics Branch to prepare these reports quarterly, but at the late summer of 1944, as you know, it appeared possible that the European war might suddenly end, accordingly, the production programs might be described as very fluid, in other words, they were changed every hour, nearly, accordingly we did not prepare those *Forecasts* for the first of October.

Q. 1945?

A. No, 1944.

Q. 1944, yes.

A. And accordingly, any changes that took place after the first of July, were recorded in the supplement. Now, this particular document, exhibit 218, was the personal property of Mr. H. J. Carmichael, and the changes in production were recorded to the Economics and Statistics Branch, then the document was sent to the Economics and Statistics Branch and the corrections were made on this document—were for Mr. Carmichael's personal use in connection with his business. Now, attached at the various backs of various sheets, you will notice there are excerpts from this supplement.

Q. From 407?

A. That is correct, you will notice that a number of these came from the October supplement, and a number from the November supplement. Now, the November supplement was number 407, and the October supplement was 218 A, this, 218 A, was submitted by myself, which is to indicate the basis of these corrections.

Q. You are referring now to the corrections that have been pinned on to the back of the index sheet, that page facing sheet No. 1?

A. That is correct. And I might add that, throughout the document, there are a great many of these items.

Q. So that —?

A. Now, I may add further, in connection with this whole problem of corrections, that the corrections as noted would appear, rather the corrections described in Exhibit 16 (*the mailing list*) are based on the cables; they, in turn, are put in statistical form by means of these supplements to the quarterly Forecast, and, in the case of the document which I now have before me, Exhibit 218, corrections as indicated in this quarterly, in this monthly statement.

Q. Which is number —?

A. 407.

Q. 407?

A. Were marked in ink in this copy, which was —

Q. 218?

A. — which was the personal property of Mr. Carmichael, and is Exhibit 218, and that Mr. Benning would have access to this document.

Q. The group of cables, Exhibit 405, they came from England and dealt with stage 2 of Imperial Programme?

A. That is correct, as it affected the Canadian programme facilities.

Q. Oh, only as it affected the Canadian production facilities?

A. That is correct.

Q. And then, with the information in those cables, and the memoranda which Mr. Carmichael made on the basis of them, Exhibit 406, then we have a monthly supplement of the type of exhibit 407 and, they in turn were put on small strips and attached to Exhibit 218?

A. For the personal use of Mr. H. J. Carmichael.

Q. Yes, and Mr. Benning would be familiar, and have access to that information all the way through that process.

A. That is correct.

Items 131, 139, 141, 143-5, 147, 149, 151 and 153 are described in the mailing list as *Supplement to contract* all dated in November 1944. These documents were undoubtedly cables from the Ministry of Supply, London to the High Commissioner for the United Kingdom in Ottawa. Item 139 for instance is described in the mailing list as:—

'D.M. and S. Supplement to contract 22.11.44,  
3 pages.



On November 22nd, 1944, the High Commissioner's office received a cable from the Ministry of Supply which is properly described as "Supplement to Contract" and dealt with a revision of Canadian production "which", as the cable says, "subject to necessary reservations as to need for periodic readjustment can be taken by D.M.S. for planning purposes as probable scale of production to be brought into operation when Stage 2 begins". The interest of the Russians in "Stage 2" was thus described by an officer of the Economics and Statistics Branch:—

A. Exhibit 16†, they were interested in the Stage 2 Programme of the United Kingdom. From what information they could get in Canada they would be able to judge to some extent the extent of the participation of the United Kingdom in the war in the Pacific. Accordingly I concentrated my efforts in trying to locate the various items described in Exhibit 16 by searching through the information that we had concerning this Stage 2 Programme of the United Kingdom.

Q. What does the Stage 2 Programme mean?

A. It meant the program, the production program for the calendar year following V-E Day.

A. This cable was added to the group just to indicate that there was a very serious situation developing with respect to ammunition and that Mr Banks, who was attached to the London Office of the Department of Munitions and Supply, advised Mr Carmichael to send Mr. Berry and Mr. Malley to England to attend a series of meetings which started on Monday, 6th November.

A number of November 1944 cables of this character were produced from the files of the Branch by this officer. Some bear as many as three dates, the date they left London, the date they were received in Ottawa and the date they were received in the Department. For this reason they can only be identified generally and not specifically with any particular item in the mailing list. Benning had all of these documents for the purpose of his work in making up his part of the monthly Forecasts and entering the corrections. Benning's evidence in connection with this matter is as follows:—

Q. I show you a document which has been marked Exhibit 218, *Forecast War Production in Canada, in 1944, and the First and Second Quarters of 1945, Ottawa, July 1st, 1944*. Now, the evidence

†List of materials sent to the Director at Moscow, dated Jan. 5, 1945.

is that this document, Exhibit 218, would be compiled from information gathered together by yourself and others, that is correct, is it not?

A. Yes.

Q. And you observe this particular document is one in which corrections have been made from time to time in pen and ink on the sheets, the original sheets, and that there have been fastened in opposite a number of entries, pieces cut out of the supplement?

A. That is right, sir.

Q. Yes. And the supplement, in turn, would be prepared from statistics and information gathered by yourself and others?

A. That is correct.

Q. Yes, that was part of your duties in the Department in which you worked. Now, was your work such as to cover all of the matters in Exhibit 218, or only part of the matters in Exhibit 218?

A. That would depend mostly upon the date, sir. I joined the Economics and Statistics Branch of the Department of Munitions and Supply in September of 1941, and I was charged specifically with the preparation of statistical reports and certain programmes, the specific ones I was responsible for at all times were, mechanical transport—

Q. Number 5?

A. Number 6, armoured fighting vehicles, number 11, naval instruments and equipment, number 12, ammunition, including empty components, number 14, small arms and munitions. The other programmes I have worked on at various times, and it was a question if somebody was busy, you would take it over, and as the amount of work reduced at various times, I have done a lot more.

A. At this juncture, with regard to 407 and 218, I would like to make a statement that there were several people in our office working on them. Then they were turned over in some cases to our own typists and in other cases up to a pool, where the ditto or the stencil was cut. That stencil in turn was taken over to Slater Street or some such place, because the Printing and Stationery Department was kept pretty well on the hop, where it was run off. It was customary in connection with these particular documents to prepare—oh, upward of 80 to 85 copies. It varied. Invariably, when



you would make out this requisition for the number of sheets you wanted run off, you would tack on another ten or so more than was actually required for your distribution list, because quite often they were spoiled and you had to piece together enough to make a complete set, and more frequently than not we received far more than we had ever ordered.

In the earlier stages, when I was there, there was an attempt made to destroy them properly. You could either sit down and tear them into fine shreds, or dispose of them in the legal manner by calling some janitor or other who would take them and see that they were burned.

Toward the latter stages I am afraid that practice pretty well went by the board, and they were just tossed around. Then the legal distribution of the documents came up to 60 to 65, I forget the exact distribution just at the moment, but I know it gradually diminished over the period I was in the Branch. Therefore there would have been literally hundreds of people who could have had access to those documents.

Q. That is these supplements?

A. Yes, the supplements and these specific documents.

Q. So that if anybody wanted to hand out a copy of Exhibit 218, or any of the supplements, they would not have to go to the work of copying it but there would be copies to be had in the department that never would be missed?

A. Yes; that also is true, sir.

Items 155 and 157 on the mailing list are there described as follows

155	Foster	North Amer. Committee of Coordn.	Report of 23.11.44	14	See who was Sect. Meet
157		North Amer. Committee	Notes and report 23.11.44	8	none

Item 155 is undoubtedly a copy of the minutes of a meeting of the Joint Gun Ammunition Department Filled and Empty, North American Coordinating Committee held on November 23, 1944, signed by H. S. Gerson, the Secretary. Identification is the more sure in that in the column of the mailing list headed "Marked" there is this entry *See who was Secr. Meet*. This note calls the attention of "The Director" to the interesting fact that

the secretary of the committee is none other than their own agent "Gray" (Gerson).

Item 157 is undoubtedly an amendment made to the minutes of the above meeting, also signed by Gerson the secretary.

As to these documents Benning said —

Q. Looking at Exhibits 411-A, 411-B and 411-C, did you ever see those documents before, or copies of them?

A. It is conceivable that this document or a copy of it came to our office, and if it had and I was reading up at the time on any particular information relative again to the preparation of documents such as Exhibit 218, I think I probably would have seen it. Whether I saw that specific one, I am not sure.

Q. That does contain information relative to Exhibits such as 218?

A. Correct. It contains information that I would be able to use in preparing reports such as those.

Q. I would like you to look at items 155 and 157. You see what has been done in connection with these two items. They refer to the same thing, the report of the same date, and evidently they have been divided into two sections and sent forward in sections.

A. Uh-huh!

Q. And in connection with item 155, again we have that notation, "See who was the secretary of the meeting", in other words, "Note who was the secretary of the meeting." Again it was Mr. Gerson?

Q. And again it is Mr. Benning who hands the document out?

A. No, sir.

Q. According to Exhibit 16 it is.

Item 157 is undoubtedly an amendment made to the minutes of the above meeting also signed by Gerson the secretary.

Item 156 on the mailing list is described as *DM and S. Report of 24.11.44* with the same comment *See who was secr meet.* This was evidently minutes of the same committee held November 24, 1944.

Benning's evidence on this is —

Q. I show you Exhibit 412, and ask you if you have ever seen that document or a copy of it?

A. It is conceivable that I might have, because the minutes of production meetings held between division chiefs of the Department of Munitions and Supply, and also meetings held between the Depart-



ment and Allied War Supplies and their directors, as a matter of course, were routed into our office, because it gave us up-to-date information for the preparation of such reports as Exhibit 218. Whether I have specifically seen this report, or a copy of it, I am too hazy to state exactly, it is more than likely I did, but I could not be positive in my assertion.

- Q. I draw your attention to the fact, Mr. Benning, that this is item 156 which is also in Exhibit 16, which is also credited to you. And you will notice that the secretary of the committee is Mr. H. S. Gerson?
- A. I would like to suggest to the Commissioners, with regard to that particular document, that after a meeting was held, the minutes were written and distributed, and if I had need of any information of that type, I would find it more convenient and up-to-date to interview the Director-General or the directors of any given division, rather than to rely on documents which were always four or five days old before you got them.

Again Item 166 in the list is thus described:—

166	Foster	Copy	Notes on the Conference of	31.5.44
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This would appear to be the minutes of a meeting—

- Q. . . . . called at the request of the chairman of the Canadian section, Joint War Production Committee, Canada and the United States—Mr. Carmichael—to consider the advisability of establishing in Canada an organization similar to the Container Co-ordinating Committee in Washington and the Anglo-American Packaging Committee in London, and to consider the necessity for co-operation between committees?
- A. Yes.
- Q. This, in a sense, was a preliminary organization meeting?
- A. That is right.
- Q. Looking to the setting up of a Packaging Committee, or something like that?
- A. That is correct.

Q. What sort of a Packaging Committee is that?

A. It is in connection with the packing of military stores for use in the Pacific theatre. One of their greatest difficulties was in connection with moisture.

Again item 167 in the list is thus described:—

167	Foster	Copy	Notes on the Conference of	13 and 24 7.44
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These undoubtedly are the minutes of two combined meetings of appointees to the Canadian Container Co-ordinating Committee and the Inter-departmental Committee on Tropical Packaging and Proofing held July 13th and 24th, 1944.

Benning's testimony continued:—

Q. I show you a document, two exhibits, 414 A and 414-B, minutes of two meetings, have you ever seen those or copies of them before?

A. It is conceivable that I have, because, after Sid Stenning had left the branch, I inherited an old book case that was chuck full of various documents, I saved a few bound volumes that existed, and threw the rest away.

Q. You would not need to refer to either of these, 414-A or 414 B for the purpose of your work?

A. No, sir.

Again items 168 and 169 in the list are described as:—

168	Foster	Copy	Notes on the conference of	21 11 44	3	Secret
169	Foster	Copy	Composition of Packaging Commission	22 11 44	3	Secret

On November 21, 1944, a meeting of the Canadian Packaging Committee was held. Item 168 would appear to relate to the minutes of this meeting while 169 would relate to the personnel of the Committee. On this matter Benning said —

Q. I show you Exhibit 415†, Mr. Benning, and ask you if you have ever seen that document before?

A. It is conceivable that I might have seen a copy of it, but it would not have been of any real interest to me whatsoever.

†Minutes of Meeting of Canadian Packaging Committee, Nov. 21, 1944.



Q. You will observe that this document, 415, is items 168 and 169 of Exhibit 16, which are credited to you as the source?

A. Well, I can assure you that with the little I know about the Packaging Committee,—all I knew was that at one time Jack Brunke with whom I used to work in the office of the Coordinator of Production, was, I think, secretary of the Packaging Committee when it was first set up, or, if not secretary, as Director of Administration of the Office or Coordinator of Production, and that Jack Brunke, for whom and with whom I used to work,—and I was charged with certain administrative responsibilities relating to the Packaging Committee.

Q. The chairman of that committee was Mr L. K. Webber? Who was he?

A. Lyle Webber. When I first came to Ottawa, he was division chief of the Packaging Commission. After that he became Director of Component Production of the branch, of the Ammunition Production Branch, of the Department of Munitions and Supply.

Q. And did you ever work with him?

A. Not directly, I was on the filing side, but I had a lot of discussions on the side in contacts with him. Yes, I worked with him in that sense.

Q. But you knew Exhibit 418 for the purpose of your work in that department?

A. Not at all, s.r. It is conceivable that it would be present in the file of the Office of the Coordinator of Production, but where, or under what particular heading, I would not know.

Item 178 in the list is *Copy Arm. Committee of Orders 16.12.44*. This is undoubtedly a summary issued December 16, 1944, of the United States Army Ordnance Committee minutes.

Item 191 is:—

191	Foster	Copy	Report (X) 30 11 44	8.12.44	3	Secret
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This is undoubtedly a document headed *Department of Munitions and Supply Production Forecast and Shipment Inventory, Report Ammunition Filing Period Month Ending November 30, 1944*. On the last page it also bears date December 8, 1944. As to this Benning said, —

Q. You will notice that that is item 192 which is credited to you? I show you exhibit 418, and ask you if you have ever seen that document or a duplicate of it?

A. Yes, I have, we received either one or two copies of the X-report.

Q. And that would be for the purpose of your work?

A. Actually, at first I used it; then I did not bother, because the *Forecast* was the only information of value to me, it was purely one which the Director General and some other people were interested in, as it was more fictitious than real.

Q. Now, you will notice, Mr. Benning, that is document 191, which is credited to you as the source?

A. Yes.

Q. Was there a report X for more than one month?

A. On deliveries, there was a monthly report.

We do not think it necessary to detail further in this report our examination of the items on the mailing list credited to "Foster" (Benning). All the identifiable documents were either those with which Benning was directly concerned or which were available to him or to Gerson, his brother-in-law and fellow spy, in the Department of Munitions and Supply where both worked.

We think the note made by Colonel Zabolin in his book as to Benning was accurate then and continued to be so —

Has been giving materials on war supplies: guns  
and other kinds of supplies.

He obtained different work with promotion.

Can give better materials.

Benning's move to the Economics and Statistics Branch gave him access to a wider supply of information than was available to him in the Ammunition Filling Division of the Ammunition Production Branch.

Zabolin also makes the note that Benning "*is contacting with Martin*" (Zhevcinov). Benning admitted having met Zhevcinov but only late in 1945.

Zabolin's note-book also contains this item:—

2. MARTIN—(With Ernst and Foster).

Basic task—information on the army and looking  
for new people.

"Ernst" of course is Adams. Zabolin's note-book shows that Koudriavtzev met Sam Carr in October 1942 and that both Adams and Benning were "*taken on to work at the end of January*" (i.e. 1943).



Benning's activities were apparently not confined to the supply of information. In the notes made by Colonel Motinov dealing with meetings leading up to the issue of the forged passport to the Russian agent in the United States, Witezak, dealt with in Section V there is this entry under date December 5, 1944:—

**asked for a meeting through Foster.**

As these notes indicate, Sam Carr in Toronto was in charge of the passport project and his right hand man there was Henry Harris. Telephone calls from *Leon* (Koudriavtzev) in Ottawa to Toronto were not made direct to Carr but to Harris. To cut down the number of these calls by Koudriavtzev and also to hide the identity of the real caller the notes show that Adams sometimes used the direct line of the Bank of Canada, and on the particular occasion here being dealt with, Benning was evidently used to make arrangements for one meeting.

Benning's explanation of the fact that the Embassy records credited him with the giving of information is interesting

Q. Now, Mr. Benning, can you suggest any reason why a record from the Russian Embassy that was never to see the light of day should credit you with having given information through those channels?

A. Yes, I could. I have given this matter a considerable bit of thought. As a matter of fact, I took occasion to re-read certain portions of *Out of the Night*. I realized that an awful lot of the book was a complete fabrication, but there were certain portions about it that were authentic. It is not unusual, as far as I can gather in other reading I have done in espionage, to create the raising—I grant you that this is fiction or fact according to the credence that any individual wants to put into it—but I find it in several books, presumably written as facts, that when a nation or a party who is resident in a country, such as this, let us say, desires certain material things that his salary does not provide for, it is a comparatively simple operation for him to find out who the people are, where they could possibly be located and then put their names down as persons whom they are receiving information from and presumably paying money for it. Presumably when their immediate chiefs come over and they are asked, let us say, in this case, "Who is this man Foster? What is his position? What has he done?", it is an authentic person, it is not a fictitious name. That is one explanation that went through my mind after my interrogation by Inspector Anthony.

The odd thing about this explanation is that it should have been advanced at all. None of the Embassy records relating to Benning contain any reference of payment to him, although Gouzenko testified that all the agents, with the single exception of Boyer, were in fact paid. Benning did not know of Gouzenko's evidence on this point. Benning's demeanour before us was one of levity until he was confronted toward the close of his testimony with an entry made by him in his own desk book. His attitude immediately underwent a swift and obvious change and he exhibited very definite concern. We shall refer to this at a later stage.

Gouzenko said in his evidence:—

Q. Do you know who Foster is? Is that a cover name or a nickname?

A. A nickname.

Q. And do you know whose nickname it is?

A. Scott Benning.

Q. How do you know that Foster was Scott Benning?

A. I read the file compiled on him by Gouzenko.

Q. And that file was also in the safe in room 12?

A. That is right.

Q. And that disclosed the real name and the cover name.

A. Yes.

Q. The file would be kept under which, the real name or the cover name?

A. Always the nickname.

Q. On the cover of the file?

A. Yes.

Benning made the following admission:—

Q. . . . You have told Mr. Williams this afternoon and tonight that practically all that material that was sent to the Russians formed part of your work?

A. That is correct, sir.

This referred to the items on Zabolotn's mailing list credited to "Foster". There were some items already referred to which Benning did not need for his work.

Benning's "conduct", "his known character as proved" to use the language of subsection (5) of Section 3 of *The Official Secrets Act 1939* may now be considered. Benning knew and had associations with almost all the other persons mentioned in this report who were acting as Zabolotn's agents,



viz: Poland, Nightingale, Boyer, Durnford Smith, Sam Carr, Lunan, Fred Rose, Gerson, Willsher, Shugar, Adams, Freda Linton, Agatha Chapman and Mazerall. He had known Poland for eight years both in Montreal and Ottawa. He had known Nightingale since 1942, he testified:—

Q. Matt Nightingale. How long have you known him?

A. I first met Matt, I think it was around the latter part of 1942, some time in the fall or early winter of 1942. I think his first wife and my sister knew each other, and I had met Mary, his first wife, in Montreal, and she ran into me up here. In those first days—and I just came here, so anybody I met from Montreal was extremely acceptable, so she asked me to keep an eye on Matt, so I had him up to the house a few times, and I was very pleased to do so.

Q. The sister you refer to is Paulette, I understand?

A. Yes.

Boyer knew Benning well and knew his views. Benning was not quite frank regarding his association with Boyer and we do not think the cause was lack of memory. Benning's evidence is as follows —

Q. Then I show you Exhibit 117†, is that the photograph of anybody you know?

A. There is a certain familiarity with somebody pointed out to me in Montreal a few times.

Q. Supposing you look at 118 at the same time?

A. No. 118 I have never seen.

Q. They are photographs of the same man, in one, he has a moustache, and in the other he has none.

A. No, I am sorry; conceivably I might know him.

Q. If I told you they were photographs of Professor Raymond Boyer, would you recognize them?

A. I would not recognize the photograph, I am sorry, but I recognize the name. I think I met Boyer once I have seen him around Montreal at various times. He was slightly out of my class, speaking financially.

Q. Did you say that you knew Dr. Boyer?

A. I knew him very, very casually. I think I met him once in Montreal slightly. He was pointed out to me as being a rather wealthy individual, and I have seen his picture in the paper. I know he was associated with the development of RDX.

†Photograph of Raymond Boyer.

Q. When your picture was shown to Dr. Boyer, this question was put to him:

Q. Who is that?

A. That is Scott Benning.

Q. Do you know him?

A. Yes.

Q. How long have you known him?

A. Oh, I have known him for a good many years, I met him, I think, in 1938, in Montreal.

Q. Do you know what his political leanings are?

A. I think I do.

Q. And what would you say they are?

A. Labour-Progressive.

Q. Or in other words, Communist?

A. Yes.

Q. And he has expressed himself to you on the subject, has he?

A. Well, he has never told me he was a Communist.

Q. What has he told you?

A. From the way he spoke, from his views on various things, I would say he was.

How is it that Boyer would say he has known you for many years, and he recognized your picture, if you say you met him only once?

A. I didn't say I met him only once. I said I met him in Montreal, and at the particular time when I was moving in the circles I talked about.

Q. You knew him well?

A. I didn't know him well, sir.

Q. He seems to know you pretty well?

A. That is not my fault.

Q. So you say his evidence, like that of the two others, is not accurate?

A. I would suggest that a man with his training might have a more retentive memory than mine.

Q. All right, thank you.

Benning has also known Lunan for a considerable time. He said —

Q. How long have you known him?

A. I think I first met Lunan some time around 1938. Those were the days of the Spanish Medical Aid, China Relief, the League against Fascism and War.

Q. You and he were interested in all those organizations?

A. I do not quite like the wording of that question — "you and he were interested in that". I was what you would call a parlour-pink, I believe, or as some of the more orthodox would call an arm-chair Bolshevik.



I think shortly after that I did a fair amount of reading, mostly of a left wing nature. I started off with—I think the first book that made a real impression on me was Beverley Nicholls' *Cry Havoc*. From there I graduated to *The Merchants of Death*. After that I had some of Laski and some of Strachey. Several times I started to read Marx, but I must admit that it proved a bit too cumbersome. The same with most of the more orthodox of the Communist writers, with the possible exception of another book that remained very clearly in my mind, I think it was called, *The Coming Struggle with Fascism* written by Palme Dutt.

On the basis of that particular kind of reading I gravitated, let us say, more naturally to people holding rather liberal viewpoints, and thus became quite interested at one time in the Civil Liberties League or Union, I forget what the Montreal one was called. I think the Toronto one was Union and the Montreal one was League, or vice versa. I attended some of their meetings.

From there I was interested in the Spanish Relief Committee. I am not entirely sure, mind you, of some of the various names, but the rough idea is the same, and the Chinese Relief Committee, and in the closing stages, before the war finally broke, the League against War and Fascism, and during that period I ran into Lunan, and I did a certain amount of work such as stuffing envelopes, and things of that nature. But I am afraid I did not allow it to interfere with my more social activities.

In spite of this we think Boyer's judgment as to Benning was reasonably accurate.

As to his relationship with Gerson, Benning testified:—

- Q. Then Exhibit 125. Is that a photograph of your brother-in-law?  
 A. Technically not my brother-in-law; my wife's brother-in-law.  
 Q. That is —?  
 A. Sam Gerson.  
 Q. And you and he are married to sisters?  
 A. Correct.  
 Q. Your wife was a Miss Schlein?  
 A. Correct.

\* \* \* \* \*

Q. What are your relations with Gerson?

A. Oh, fairly good. We have had the odd scrap. We are rather different in temperament, sir. He is inclined to be a bit more lethargic than I am, a little slower, and I am inclined to be a little more volatile and fly off the handle more readily, but pretty sound.

Q. Do you see him often?

A. Quite frequently since his wife has moved up here. They took a place, I think it was last April, up at Gleneagles, and my wife and I would go up quite often and spend the week-end.

Q. And did you meet the same friends?

A. Oh, well, sir, Sam bowled, and he knew a lot of other people I didn't do very much bowling or things like that. We both know Agatha Chapman. Sam was not a great person to get around an awful lot. I was more inclined to go out and have people in more frequently than he was, due to the fact that he lived in the country, and it was very awkward for people to get out there.

The following evidence given by Benning strikes us as being significant —

Q. Did you know that Gerson was giving information?

A. I was not aware of it, sir, and I find it very difficult to believe it, sir, too.

Q. Did you ever discuss such matters with him?

A. No, I found it preferable and more convenient not to discuss it with anybody — not even my wife, nor questions of the type of work I was doing because . . .

A document in Gerson's handwriting was produced by Gouzenko from the Russian Embassy. This was put to Benning and he testified as follows:

Q. Mr. Benning, I would like to ask this. Mr. Gerson made certain admissions to us and documents in his handwriting were produced from the Russian Embassy which he admitted to be in his handwriting, and he made certain other admissions to us. Then he also very clearly admitted to us, perhaps in what he did not say as well as in what he did say, and in fact he said he did not want to say any more than he had said because, he said, he did not want to put the finger on anybody for certain personal reasons. Knowing him as you do, what interpretation would you put on that?

A. He did not want to put the finger on anybody for certain personal reasons?



Q. Yes?

A. Really, I do not know.

Benning also was a member of certain study groups or "cells" to which some of these others belonged. Willsher testified:—

Q. Will you look at this photograph and say whether you recognize the person represented there?

A. Yes.

COMMISSIONER:—Whose picture is that?

COUNSEL:—Eric Adams.

Q. When did you meet him?

A. At a private meeting, I don't know whether it was his or somebody else's.

Q. When was that?

A. I think it is 1942. I don't know, to be exact.

Q. In what circumstances?

A. In a study group.

Q. Who was present?

A. Miss Chapman.

Q. Who is Miss Chapman?

A. She works in the Bank of Canada, or in the Bureau of Statistics.

Q. And her full name is Agatha Louisa Chapman?

A. Well, Agatha; I do not know the second name.

Q. She was working where?

A. At the Bank of Canada at the moment. I don't know whether she is in the Bureau as an employee, or the Bank of Canada, but at that time it was the Bank of Canada.

Q. Who was she working for in the Bank of Canada?

A. I don't know, except that Mr. Adams was in her office. I don't know whether he was her direct employer or not.

Q. And who was present the night you met Adams?

A. Somebody Benning, I think.

Q. What is his first name?

A. I have forgotten.

Q. How old is he, about?

A. About 30.

Q. I suggest that his name was James Scotland Benning?

A. Scott; that's right.

Q. And where was he employed at the time?

A. I think it is the Department of Munitions and Supply.

According to Willsher this group met every three weeks up to the end of 1944.

Benning's evidence as to this is:—

Q. Then Exhibit 126, that is the photograph of a woman. Do you know her?

A. I have met her in my days as a ski instructor. I remember she was in a ski class.

Q. Do you remember her name?

A. Yes, it is Willshire, I think, either Wiltshire or Willshire. I think she was up at my house once, when I ran a listening group on this program *Things to Come*.

Q. Do you know what she did, what her occupation was?

A. I am not entirely sure, I think she worked for the British Government, in some particular position.

Q. In Ottawa?

A. In Ottawa.

In Benning's treatment this group becomes merely a group listening to the radio. However, he subsequently broadened this out somewhat—

Q. Did you know Miss Willsher?

A. Yes, sir.

Q. Where did you meet her?

A. I think the first time I met Miss Willsher was when she attended a meeting of the listening group at my home. I also met her skiing, going skiing with Agatha. She was in the car several times.

Q. Did you ever attend a meeting at Agatha Chapman's apartment with her, a study group?

A. I have been there for a social evening, where the general course of the discussion was primarily of an economic and political nature.

. . . . .

Q. Did you ever belong to any study groups, limited in numbers, that used to meet at Agatha Chapman's house?

A. I have attended what to me was an informal group, where we discussed casually topics very much in the same nature as the *Things to Come*, I mean current economic and political problems, but I was not aware of its having any particular significance or of being limited to any particular degree.



Q. Do you recall attending a meeting at Miss Chapman's house, where you attended as representative of one of these small study groups, at which there were representatives of some five or six other Ottawa groups, which met to discuss questions of policy?

A. What type of study group are you referring to there, sir?

Q. I am referring to study groups that have been described by witnesses here as Communist cells?

A. Well, my answer to that is no, sir.

Q. Did you belong to any small study group in which the Marxist ideology and economic principles were discussed?

A. Again my answer to that would be, I have, in the days in Montreal, belonged to an organization or a study group that was known as the *Left Book Club*, where we discussed the current publications and most of them, or I should say all of them, were of a left wing character; and the odd time I have been to Agatha's house and we have had casual discussions. My wife and I have dropped in, and there were other people there, and we have discussed things casually; but it was never on a regular or fixed nature.

Q. Are you aware that at these study groups, the ones I am referring to, which have been described here as Communist cells, small fees are paid to a treasurer and then by the treasurer paid into a central fund?

A. I could well believe it.

Q. You say you could well believe it. Are you not aware of the fact that that is the way these study groups work?

A. The study groups that I have been associated with, we have been solicited for funds for *The Tribune*, and things of that nature, but I was not aware of the fact that the funds were being used for the advantage of any specific political party.

. . . . .

Q. Miss Willsher, in giving her evidence before this Commission, Mr Benning, referred to being a member with Miss Chapman and with others of a study group in Ottawa in the year 1942. She stated that Miss Chapman, Mr. Eric Adams, yourself and a man named George—and perhaps one or two others, were members of a study group which you attended in Ottawa regularly for the purpose of studying Marxist ideology; what would you say about that?

A. I would say that I have attended social evenings in Agatha's house when George was alive.

Q Did you attend a study group in 1944 of which Matt Nightingale was a member?

A. I think it was in 1944 I had a listening group in my own house, and Matt used to turn up on Tuesday evenings fairly regularly

Benning's evidence as to his acquaintance with Shugar is as follows:—

Q. Then Exhibit 128, is that a photograph of anybody you know?

A. I have met him. He used to be in the navy. I have met him at Fortune, skung. His name is Dave Shugar.

Q Is he a friend of yours?

A. No, I would call it more an acquaintance.

Q. How long have you known him?

A. In the last year and a half I would say I have run into him about eight or nine times skung.

Q. Only on that basis?

A. Yes, sir.

Q. When you speak of skung, did you leave Ottawa with him to go skung or just meet him there?

A. I met him, and once I drove down with him. I forget who it was, but we were waiting for a bus and somebody gave us a lift into town.

Q. But your trip together was not fixed previously?

A. No, sir.

Q. You always met there without telephoning or anything?

A. Yes, sir.

. . . . .

Q. I think you said you had also met or knew Shugar?

A. I have met Shugar skung.

Q. Skung?

A. That is correct.

Q. Are those the only occasions that you have run into him?

A. To the best of my knowledge. I have run into him on the street or in the restaurants. As a matter of fact I have had lunch with him, but through meeting him accidentally at Murphy-Gamble's, and things like that. We would wait in the line-up, and they would ask if four people would pair up.

Q All your contacts with him were accidental?

A. Were incidental.



Q I said "accidental"?

A. Yes, sir.

Q. Purely accidental?

A. That is correct.

Q You had no business with him, you had no occasion to communicate with him apart from these accidental contacts?

A. No, sir.

However, Shugar's name and telephone number at Naval Service Headquarters were found entered in Benning's writing in the telephone number finder which Benning kept on his desk. Faced with this Benning then explained

Q And you say that the only time you ever met Shugar was skiing, and you never had any communication with him except that. Will you explain why Shugar's name and telephone number is in there, in your handwriting?

A. Yes, sir. I was trying to get an apartment, and I made it a practice at that time — and I think that can easily be substantiated by practically everybody I met — I inquired their telephone number, in which event I would have that telephone number because at that particular time I don't think he was looking for one.

Q. And being up skiing, where would you make the entry?

A. I would probably jot it down on the back of a package of cigarettes, or some such thing, and put it in my phone index when I came back. Or I might have called him, conceivably, because I have very vague recollections of having heard him mention having seen an apartment, or something like that.

Q And is that why you had Rose's telephone number in the previous exhibit also?

A. I don't think so.

Q. The question of an apartment?

A. I don't think so, sir.

As to his contacts with Fred Poland and Fred Rose, Benning testified —

Q. What about Poland?

A. The same answer would go there. Fred (Poland) I saw around less often. I quite considered them as being very much as I was, interested onlookers interested with them to do a certain amount of work in things that they believed in.

. . . . .

Q. Then Exhibit 124. Is that a photograph of anyone you know?

A. That is Fred Rose, M.P.

Q. Do you know him personally?

A. Oh, about the same way that I know Sam Carr. I have heard him speak, and I have bumped into him at these cocktail parties and musicales that the left wing circles used to hold to raise funds for—what was the Communist paper called in those days? I think it was *The Clarion*, and then it became *The Tribune*. They had various fund-raising stunts.

Q. And you would meet him at those?

A. That is right.

Was that your only contact with him?

A. Yes; purely a social contact.

Q. At cocktail parties.

A. I have heard him speak, as I said before, at public meetings, and I have run into him at cocktail parties, and I have also noticed him walking around Ottawa, going into the House, and things like that.

Q. Any other contact with him?

A. No, sir.

However in an alphabetical notebook found in Benning's desk he had entered in his own writing on the appropriate page the following, after other names and numbers:—

Fred 3-8605 4394.

These numbers are respectively the telephone numbers of Fred Rose at his Ottawa apartment 30 Beechwood Ave and at Room 639 in the House of Commons.

When this fact was brought to Benning's attention in the witness box his demeanor underwent the change to which we have already referred. He lost his care-free manner and became visibly agitated. Thereupon he gave the following explanation:—

Q. Do you recognize this booklet, exhibit 397?

A. Not from here, sir.

Q. Then take it and look at it.

A. Oh, yes.



Q. That is yours, is it?

A. Yes, sir.

Q. The entries in there are your handwriting?

A. Yes, sir.

Q. Let me see it, please. On the page that has the letters E and F on it, the last entry is, *Fred 3-8605. 4394*, and the evidence here is that those are the telephone numbers of Fred Rose in Ottawa at Beechwood Avenue and in the House of Commons. Will you explain why those entries are in your handwriting, if the only contacts you had with Fred Rose were accidental as you have explained?

A. No, I am afraid I cannot, sir. I may have put the numbers down as I was in the habit of putting down the numbers of everybody I had known or met at various times.

Q. You did not put down the numbers of everybody you met at cocktail parties or saw going along the street, did you?

A. Not as a general rule.

Q. Then will you explain frankly, Mr. Benning, without any equivocation or reserve, why these entries are there?

A. I would like to, sir. If you say they are in my handwriting, they must be.

Q. You said they were. Look at it. I asked if the entries in the book were in your handwriting. You said they were. Do you want to change that?

A. No, sir; that is my writing.

Q. Then explain the circumstances under which you put them there?

A. I am afraid I cannot, sir, because I do not recall having put it in there.

As we have occasion to point out elsewhere, *The Official Secrets Act 1939* makes the fact that a person has been in communication with an agent of a foreign power "*evidence that he has, for a purpose prejudicial to the safety or interests of the State, obtained or attempted to obtain information which is calculated to be or might be or is intended to be directly or indirectly useful to a foreign power*", (sub-section 2 of section 3).

By sub-section 4 a person shall "*unless he proves the contrary*" be deemed to have been in communication with an agent of a foreign power

if, among other things, the name or address or any other information regarding such an agent has been found in his possession. We have no doubt that Fred Rose was such an agent.

Regarded therefore from the standpoint of the Statute, there is evidence that Benning obtained information from the Department of Munitions and Supply for a purpose prejudicial to the safety or interests of Canada, that purpose being to communicate it as the documents produced from the Embassy say he actually did. We are unable to say that Benning has met the burden so placed upon him. For our part we do not believe his denial.

In Benning's house there was found a number of sheets written in manuscript in the German language containing names, numbers and camps of some thirty-three German prisoners of war in Canada, with certain extracts from letters evidently written to them, and the names and addresses of the senders, all of whom appear to live in Germany. These letters bear dates from December 1942 to September 1944. There is also a list of names of some of these German residents with such comments as "morale high" or "low" followed by the name of the prisoner of war in which each person was interested.

When Benning was asked about these documents he said they were in the handwriting of his wife, that she had worked in the Censorship Branch of the Post Office, and that in this way she "practised" her German in her lunch hour when she first secured that position. This explanation will hardly do for the reason that while Benning's wife was first employed on December 1st, 1942, she continued to be employed until September 1945 and the letters referred to bear dates in 1942, 1943 and up to September 1944. Moreover the analysis of the morale of the letter-writers hardly comes under the head of brushing up on a language.

It may be pertinent in this connection to call attention to sub-section 2 of section 3 of *The Official Secrets Act, 1939*, which provides that if any note, document or information relating to any "prohibited place" or anything in such a place is made, obtained, collected, recorded, published or communicated by any person except a person acting under lawful authority, it shall be deemed to have been made, obtained, collected, recorded, published or communicated for a purpose prejudicial to the safety or interests of the State "unless the contrary is proved". A prisoner of war camp would seem to come within the definition of a "prohibited place" in section 2 (i) (i) of the statute.



Having, therefore, been directed by the terms of Order in Council P.C. 411 to "inquire into and report upon which public officials and other persons in positions of trust or otherwise have communicated, directly or indirectly, secret and confidential information, the disclosure of which might be inimical to the safety and interests of Canada, to the agents of a Foreign Power and the facts relating thereto and the circumstances surrounding such communication" we are of opinion that the evidence before us throws upon Benning the burden of reasonably satisfying us that he has not so communicated information and we are not so satisfied, on the contrary our opinion on the evidence before us is that he was engaged in these operations.

## SECTION III. 13

## ALLAN NUNN MAY

One of the many objectives of the Russian organization in Ottawa was the atomic bomb. The exhibits produced reveal how anxious the organization was to obtain as full information as possible about the work done by the nuclear physicists, in connection with the use of atomic energy.

As far back as March 18th, 1945, Lunan reported to Rogov:—

**Badéau (Smith) informs me that most secret work at present is on nuclear physics (bombardment of radioactive substances to produce energy). This is more hush-hush than radar and is being carried on at the University of Montreal and at McMaster University at Hamilton. Badéau thinks that government purchasing of radium producing plant is connected with this research.**

Lunan was here transmitting a report from Durnford Smith (Badéau) on the work of the National Research Council.

In mid-April of the same year one of the tasks given to Lunan and set out in the "*Organizational Directives*" for his group was —

5. . . . . Ask Badéau whether he could obtain Uran No. 235, let him be cautious. If he can, let him write in detail about the radium producing plant.

At about the same time, Motinov prepared a draft of a telegram for Zabotin to send to Moscow, which reads:—

To the Director,

The Professor reported that the Director of the National Chemical Research Institute Committee, Stacey, told him about the new plant under construction: Pilot Plant at Grand'Mere, in Province of Quebec. This plant will produce "Uranium". The engineering personnel is being obtained from McGill University and is already moving into the district of the new plant. As a result of experiments carried out with Uranium, it has been found that Uranium may be used for filling bombs, which is already in fact being done.

The Americans have developed wide research work, having invested in this business 660 million dollars.

"Grant"

\* Paint type indicates words crossed out in original documents.



This telegram was probably not sent. "*The Professor*" is Raymond Boyer. The location of the plant is wrongly given; it was at Chalk River and not at Grand Mere. The mistake evidently occurred when Motinov later made his notes of what Rose had told him of Rose's conversation with Boyer, which had also dealt with R.D.X.

At this time, according to another document, Angelov ("*Baxter*") was given instructions to approach May (*Alak*) and to obtain from him a sample of Uran. 235, and information as to the location of the United States Atomic Bomb Plant. The same mistake as to the location of the plant appears in this exhibit.

There was some talk, too, that Smith might get into atomic research work. A report in Russian on one of the meetings of Lunan's Group, probably that of April 18th, says—

Badeau asks for permission to change to work on uranium. There is a possibility either by being invited or by applying himself, but he warned that they are very careful in the selection of workers and that they are under strict observation.

The same exhibit records Motinov's "*Conclusion*":—

...2. Not to recommend the transfer of Badeau to the production of uranium but to develop more widely the work in Research. In the future, for the purpose of more efficient direction, it is expedient to detach him from Back's group and to key him up as an independent contact

The matter was also taken up with Halperin (*Bacon*) because Lunan records, in a report dated 5th July, 1945:—

Bacon . . . He is himself curious about the Chalk River Plant and the manufacture of Uranium. He claims that there is a great deal of talk and speculation on the subject but that nothing is known outside of the small and carefully guarded group completely in the know. He emphasized that he himself is as remote from this type of information as I am myself.

Evidently Lunan pressed Halperin to get Uranium-235 because another document records a report from him on Halperin (*Bacon*) as follows

Back's GroupMat. No. 1Bacon.

It has become very difficult to work with him, especially after my request for Ur 235 (Uran 235). He said that as far as he knows, it is absolutely impossible to get it. Thus for instance he declared that perhaps it (Uran) is not available in sufficient quantity. Bacon explained to me the theory of nuclear energy which is

probably known to you. He refuses to put down in writing anything and does not want to give a photograph or information on himself. I believe I think that at present he has a fuller understanding of the essence of my requests and he has a particular dislike for them. With such a trend of thought as he has, ~~we can~~ not obtain it is impossible to get anything from him except with the exception of verbal descriptions, and I am not in a position to ~~unable~~ to understand everything fully where it concerns technical details.

I asked him what is taken into consideration in the construction of the very large plant (Chalk River, near Petawawa, Ontario), in the general opinion the principle of production of which is based on the physical properties of the nucleus; with regard to his expression of opinion that it is impossible to get Uran 235. He replied that he does not know. He believed that the project is still in the experimental stage.

In July, 1944, Dr. Cockcroft, who holds the chair of Jacksonian Professor of Natural Philosophy at Cambridge, England, and who is a scientist of international reputation, had been made director of Atomic Energy Project, Montreal and Chalk River, and worked in collaboration with Canadian scientists at the Montreal Laboratory of the National Research Council.

Dr. Allan Nunn May, a British temporary civil servant, formed part of the research group that came over to Canada, and was at the Montreal Laboratory as a group leader under Dr. Cockcroft. In the performance of his duties, May had access to a substantial amount of knowledge of the work that was being done in connection with the Atomic Energy Project. The evidence shows that before coming to Canada, he was an ardent but secret Communist and already known to the authorities at Moscow. Not

\* Faint type indicates words crossed out in original documents.



long after his arrival here he was contacted on instructions from "*The Director*", and given the cover name "*Alek*" by the organization of Colonel Zabotin. In view of his background and the position he occupied, he was a logical person from whom the Russians could expect to obtain the available knowledge on atomic energy. By telegram dated July the 28th, 1945, "*The Director*" at Moscow sent a telegram to Colonel Zabotin with reference to Dr. Allan May ("*Alek*"), reading in part as follows:—

No. 10458

30.7.45

To Grant

Reference No. 218.

. . . Try to get from him before departure detailed information on the progress of the work on uranium. Discuss with him: does he think it expedient for our undertaking to stay on the spot; will he be able to do that or is it more useful for him and necessary to depart for London? In the first half

Director. 28.7.45

These instructions were promptly followed in Ottawa, for a few days later, on the 9th August, 1945, the following telegram was sent to Moscow by Zabotin:—

241

To the Director,

Facts given by Alek: (1) The test of the atomic bomb was conducted in New Mexico, (with "49", "94-239"). The bomb dropped on Japan was made of uranium 235. It is known that the output of uranium 235 amounts to 400 grams daily at the magnetic separation plant at Clinton. The output of "49" is likely two times greater (some graphite units are established planned for 250 mega watts, i.e. 250 grams each day). The scientific research work in this field is scheduled to be published, but without the technical details. The Americans already have a published book on this subject.

(2) Alec handed over to us a platinum with 162 micrograms of uranium 233 in the form of oxide in a thin lamina. We have had no news about the mail.

Grant.

9.7.45.

\* Faint type indicates words crossed out in original documents.



On the same date, another telegram was forwarded by Zabolin giving information obtained from May on a man by the name of Norman Veall, upon whom we are also reporting (see Section IV, 1). This telegram disclosed that May advised against accepting any information about the atomic bomb from Veall.

243

To the Director,

Alek reported to us that he has met Norman Veal (he was at his home). Veal works in the laboratory of the Montreal branch of the Scientific Research Council . . . He asked the opinion of Alek: Is it worth while for him (Veal) to hand over information on the atomic bomb. Alek expressed himself in the negative. Alek stated that Veal occupies a fairly low position and knows very little. . . .

Grant.

9.8.45.

A few days after May had handed over to the Russians information concerning the atomic bomb, and the above-mentioned quantity of uranium 233, Zabolin paid a social visit to a friend living in the vicinity of Chalk River. He then had the opportunity of seeing the plant from the river during a motor-boat cruise, and reported to "*The Director*" what he had seen. The latter, on the 14th of August, 1945, sent him a telegram which included the following:—

11438.

14.8.45.

To Grant

1. Your No. 231.

Wire what connections F—— has with the plant indicated by you, where is he working at present, and what are your mutual relations with him?

If possible, give a more detailed description of the exterior of the plant. . . .

Director.

May made two visits to the same plant: the first on the 16th August, 1945, and the second on the 3rd September. He also went on several occasions to the Chicago plant, doing experiments in collaboration with American scientists.



On August 22nd, 1945, "*The Director*" telegraphed Zabolin:—

Supplement to No. 11923

N 11931

22.8.45

To Grant

Take measures to organize acquisition of documentary materials on the atomic bomb!

The technical process, drawings, calculations.

Director,

22.8.45.

On the 31st August Zabolin, not having received any reply from Moscow as to the value of the information on the atomic bomb which he had sent, telegraphed to "*The Director*" as follows:—

275

To the Director

I beg you to inform me to what extent have Alek's materials on the question of uranium satisfied you and our scientists (his reports on production etc).

This is necessary for us to know in order that we may be able to set forth a number of tasks on this question to other clients. Have you received all NN mail up to July of this year?

Grant

31.8.45

The evidence shows that May provided the Soviet espionage leaders with information on other subjects as well as on the atomic bomb. One of the documents is a telegram from Zabolin to Moscow, reading as follows:—

242

To the Director

On our task Alek has reported brief data concerning electronic shells. In particular these are being used by the American Navy against Japanese suicide-fliers. There is in the shell a small radio-transmitter with one electronic tube and it is fed by dry batteries. The body of the shell is the antenna. The bomb explodes in the proximity of an aeroplane from the action of the reflected waves from the aeroplane on the transmitter. The basic difficulties were: the preparation of a tube